



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,418	08/04/2003	Naoya Nakanishi	SNY-038	2559
20374	7590	04/18/2006	EXAMINER	
KUBOVCIK & KUBOVCIK SUITE 710 900 17TH STREET NW WASHINGTON, DC 20006			CHUO, TONY SHENG HSIANG	
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Cur

Office Action Summary	Application No.		Applicant(s)	
	10/633,418		NAKANISHI ET AL.	
	Examiner		Art Unit	
	Tony Chuo		1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is responsive to the amendment received on 4/6/06. The applicant has not overcome the 102 and 103 rejections with the amended claims. The instant claims are finally rejected over the 102 and 103 rejections.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ura (WO00/62356). Regarding claim 1, the Ura reference teaches a battery comprising an electrode unit "10" in a battery can "5" and a pair of negative electrode terminal "5" and positive electrode terminal "6". In addition, the terminal assembly of positive electrode terminal "6" is secured to a lid of the battery, a current collector plate "8" is connected to an edge of an electrode at one end of the electrode unit "10" to electrically connect the electrode unit to the terminal assembly, and one connecting piece "8a" which is protrusively formed on a surface of the current collector plate "8" on a side of the current collector plate that is not connected to the edge of the electrode and is welded to a base portion of the terminal assembly to form a weld extending in the direction of the axis of the electrode unit (See Figure 1). In addition, it also teaches negative and positive

Art Unit: 1746

electrodes spirally wound around an axis of the electrode unit (See column 6, line 33-37). Regarding claim 4, it also teaches a current collector plate that directly contacts an edge of an electrode at one end of the electrode unit (See Figure 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ura (WO00/62356) in view of Coetzer (US 6007943). Ura reference is applied to claim 1 and 4 for reasons stated above. However, the reference does not expressly teach a flange portion of the terminal assembly connected to an inner circumferential wall or outer circumferential wall of one or more connecting pieces and is welded to one or more connecting pieces by laser welding. In addition, the reference also does not expressly teach an outer circumferential wall of one or more connecting pieces and the inner circumferential wall of the flange portion forming a connection that is welded from outside the flange portion. The Coetzer reference does teach an outer circumferential wall of the connecting piece "58" and an inner circumferential wall of the flange portion "49" of the terminal assembly "46" forming a connection that is welded from outside the flange portion (See Figure 1 and column 6, lines 13-14). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

the Ura battery to include a flange portion of the terminal assembly that forms a connection with a connecting piece of the current collector that is welded from outside the flange portion in order to reduce the internal resistance of the battery.

Response to Arguments

Applicant's arguments filed Remarks have been fully considered but they are not persuasive. The Ura reference does teach a negative electrode and positive electrode spirally wound around an axis of the electrode unit. In addition, it still teaches a connecting piece that is protrusively formed on a surface of the current collector plate on a side of the current collector plate not connected to the edge of the electrode as well as a current collector plate that directly contacts the edge of the electrode. Further, it still teaches welding the connecting piece extending in the direction of the axis of the electrode unit.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1746

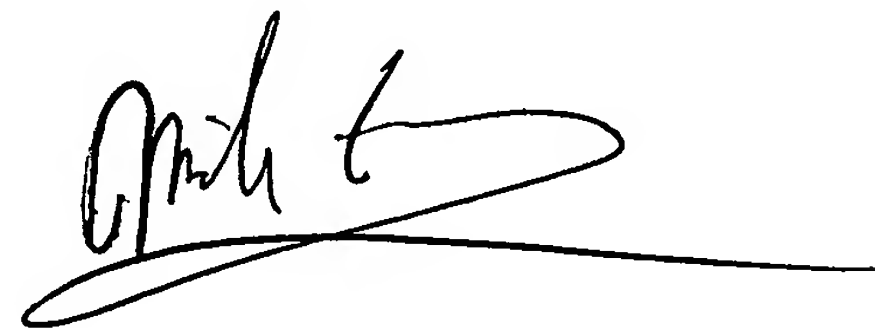
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Chuo whose telephone number is (571) 272-0717. The examiner can normally be reached on M-F, 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC 4/14/06

A handwritten signature in black ink, appearing to read "Michael Barr", with a long horizontal flourish extending to the right.

MICHAEL BARR
SUPERVISORY PATENT EXAMINER